

Work Order ID 100847

\*100847\*

Page 1

May-01-13 7:30:49 AM

Item ID: D4011-1

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Clamp, Short

Stop \*NS2\*

Start Date: 4/30/13 Start Qty: 12.00

\*12\*

Cust Item ID:

Required Date: 4/30/13 Req'd Qty: 12.00

\*12\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 13-05-06 Tooling:

Date:

Run Start

\*NR1\*

QC: \_\_\_\_\_

Date: \_\_\_\_\_ SPC (Y/N):

Date: \_\_\_\_\_

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
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D4011	B								
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100 0.00

\*100\* PURCHASING 12 0 Ae 13-07-23  
Waterjet Memo 0.00

FLOW CNC Waterjet J-Cut as per Dwg  
304.080 Dwg Rev: B 0.00  
Prog Rev: B

2-Deburr if necessary

110 0.00

\*110\* QC2- Inspect parts off machine FAI/FAIB 12 0 Ae 13-07-23  
QC Memo 0.00

Quality Control

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
Part No. _____			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
NCR No. _____			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear					General						
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube					<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						
					<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Other						

Work Order ID 100847

May-01-13 7:30:49 AM

\*100847\*

Page 2

Item ID: D4011-1

Accept

\*N900040100\*

Setup Start

\*NS1\*

Revision ID:

Item Name: Clamp, Short

Stop

\*NS2\*

Start Date: 4/30/13 Start Qty: 12.00

\*12\*

Cust Item ID:

Required Date: 4/30/13 Req'd Qty: 12.00

\*12\*

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

\*120\*

QC

Quality Control

QC8- Inspect parts - second check

0.00

12  
12/28

12

130

\*130\*

Brake NC

Brake NC

Form as per dwg  
NC BRAKE

0.00

12/23

12

SB

13/07/24

140

\*140\*

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

10/27

12/24

12

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS										
			Rework	<input type="checkbox"/>	Skid-tube	<input type="checkbox"/>	Crosstube	<input type="checkbox"/>	Water Jet	<input type="checkbox"/>	Engineering				
			Scrap	<input type="checkbox"/>	Machining	<input type="checkbox"/>	Small Fab	<input type="checkbox"/>	Prod. Eng. Coor.	<input type="checkbox"/>	Quality				
			Use-as-is	<input type="checkbox"/>	Thermoforming	<input type="checkbox"/>	Finishing	<input type="checkbox"/>	Rec/Store/Packaging	<input type="checkbox"/>	Other				
			Work Order Update	<input type="checkbox"/>	Large Fab	<input type="checkbox"/>	Composite	<input type="checkbox"/>	Supplier	<input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector				
Doc/Data															
Equip/Tooling															
Operator															
Material															
Setup															
Other															
Process															
Supplier															
Training															
Unapproved															
FAULT CATEGORY															
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	



NCR: Yes / No

DQA: Date:

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS								
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>						
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector		
Doc/Data	<input type="checkbox"/>													
Equip/Tooling	<input type="checkbox"/>													
Operator	<input type="checkbox"/>													
Material	<input type="checkbox"/>													
Setup	<input type="checkbox"/>													
Other	<input type="checkbox"/>													
Process	<input type="checkbox"/>													
Supplier	<input type="checkbox"/>													
Training	<input type="checkbox"/>													
Unapproved	<input type="checkbox"/>													
FAULT CATEGORY														
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio		<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions						<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Other

# Picklist Print

May-01-13 7:30:49 AM

Page 1

Work Order ID: 100847

Parent Item: D4011-1

Parent Item Name: Clamp, Short

Start Date: 4/30/13

Required Date: 4/30/13

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP RevA: New issue DD verified by:EC  
HOUSE DD verified by:EC

IPP Rev:B 11.05.19 MADE IN

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S14GA 304SS sheet .080		Purchased	No			100	sf	28.1400	0.063	0.7957896		0.8	At 13.07.23

Location	Loc Qty	Loc Code
MAT020	28.14	
117933	4.5	
119276	23.64	119276

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS								
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Doc/Data														
Equip/Tooling														
Operator														
Material														
Setup														
Other														
Process														
Supplier														
Training														
Unapproved														
FAULT CATEGORY														
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	
											<input type="checkbox"/> Other			

DART AEROSPACE LTD	Work Order:	100847
Description: Clamp, Short	Part Number:	D4011-1
Inspection Dwg: D4011	Rev: B	Page 1 of 1

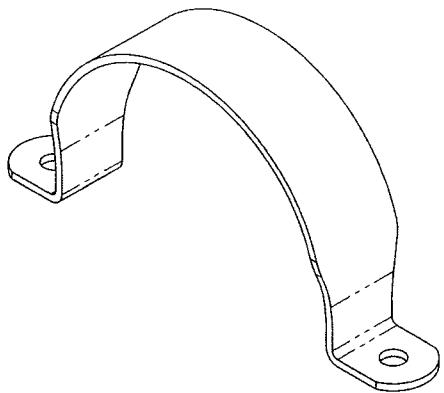
# FIRST ARTICLE INSPECTION CHECKLIST

## X First Article      Prototype

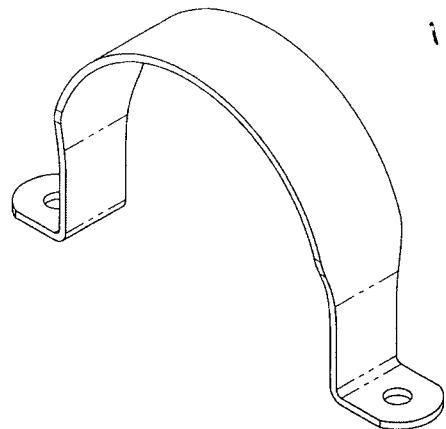
940

Measured by:	<i>Ac</i>	Audited by:	<i>27 e.p.</i>	Prototype Approval:	N/A
Date:	13.07.23	Date:	<i>13.07.23</i>	Date:	N/A

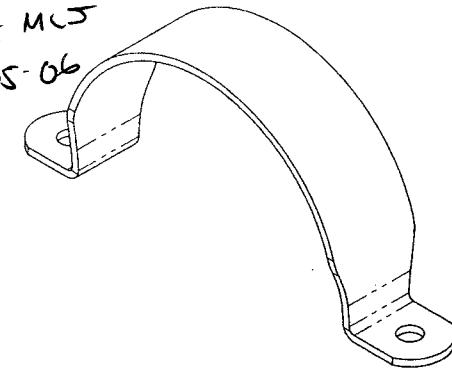
Rev	Date	Change	Revised by	Approved
A	09.12.14	New Issue	KJ	



D4011-1 CLAMP, SHORT



D4011-3 CLAMP, LONG



D4011-5 CLAMP, SHORT (OEM)

100847 MCJ  
13-05-06

NOTES:

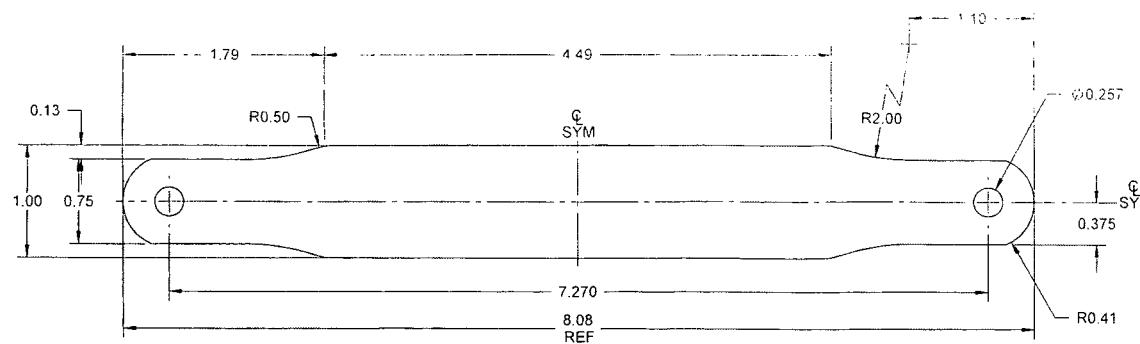
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET ANNEALED 2B FINISH, 14 GAUGE (0.078 THICK)  
PER AMS 5513 (304) OR 5524 (316) OR ASTM A240 OR ASME SA240  
REF. DART SPEC. M304S14GA
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4011-X" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.02 lbs EACH

8 7 6 5 4 3 2 1

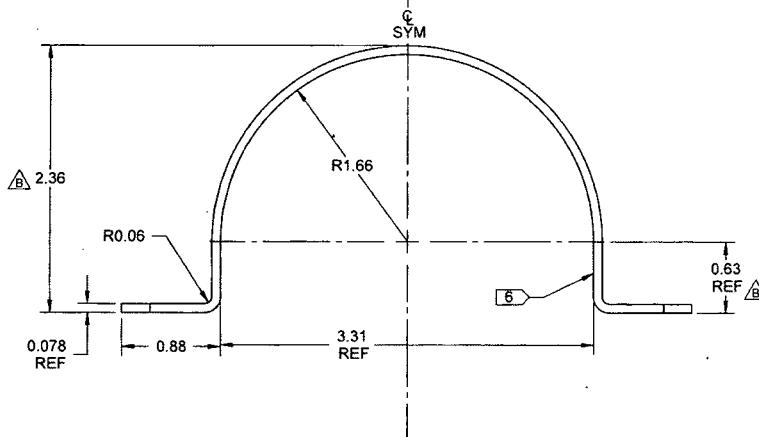
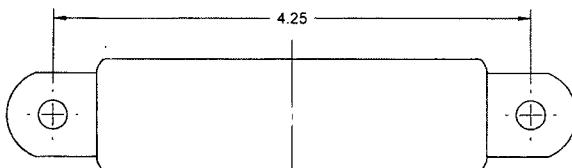
B	SHORTEN HEIGHT OF -1/3 CLAMPS BY 0.125; ADDED -5 REASON: PROVIDE MORE CLEARANCE UPON INSTALLATION ON OEM SKIDTUBES	MB	09.11.11
A	NEW ISSUE	MB	09.10.21
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>A</i>	DART AEROSPACE LTD	
DRAWN	<i>A</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AJS</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>AS</i>	D4011	SHEET 1 OF 4
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.	<i>AS</i>	CLAMP	NTS
DATE	09.11.11	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS THE PROPERTY OF DART AEROSPACE LTD. IT IS FOR INTERNAL USE ONLY. NOT TO BE COPIED OR MADE AVAILABLE TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED  
2009-11-24  
*MP*

100847



D4011-1F CLAMP, SHORT FLAT PATTERN

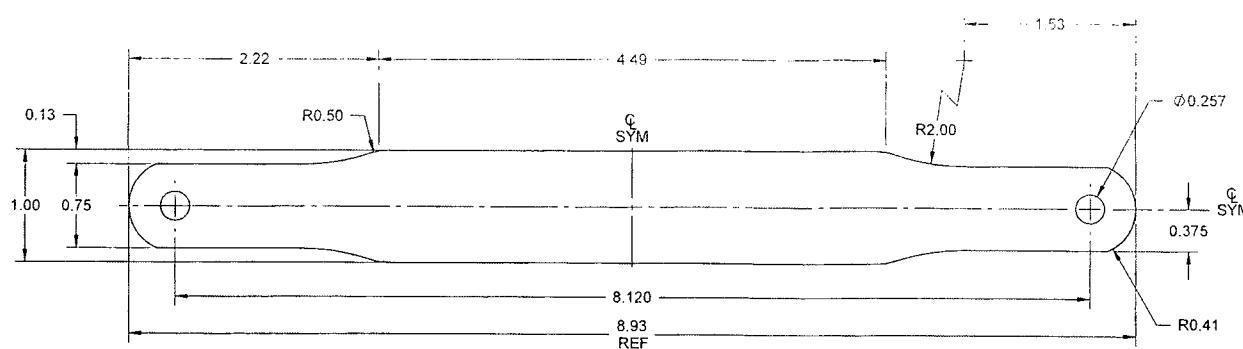
D4011-1 CLAMP, SHORT  
(MAKE FROM D4011-1F)RELEASED  
2009-11-24  
MP

DESIGN	<u>  </u>	DART AEROSPACE LTD
DRAWN	<u>  </u>	HAWKESBURY, ONTARIO, CANADA
CHECKED	<u>AJS</u>	DRAWING NO.
MFG. APPR.	<u>  </u>	D4011
APPROVED	<u>  </u>	REV. B
DE APPR.	<u>  </u>	SHEET 2 OF 4
DATE 09.11.11		SCALE NTS

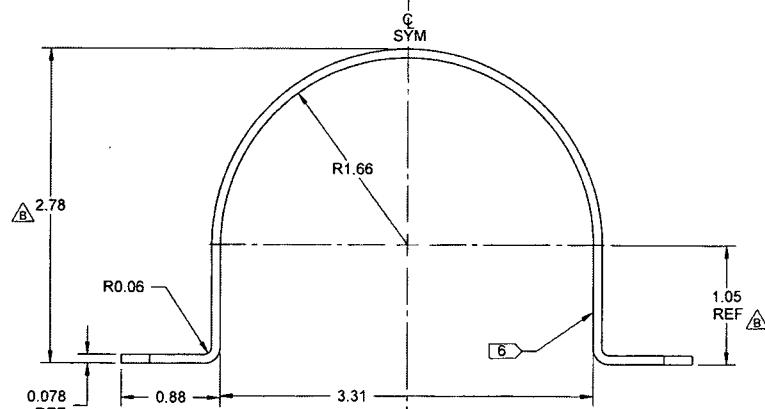
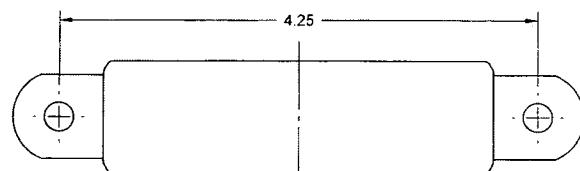
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100847



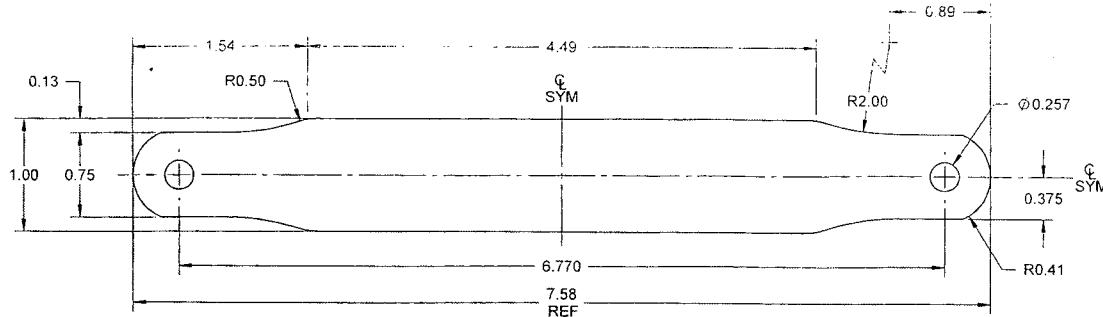
D4011-3F CLAMP FLAT PATTERN, LONG

D4011-3 CLAMP, LONG  
(MAKE FROM D4011-3F)RELEASED  
2009-11-24  
NP

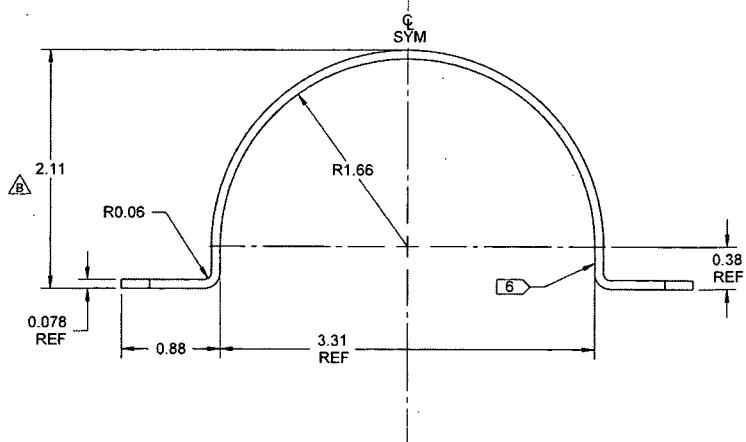
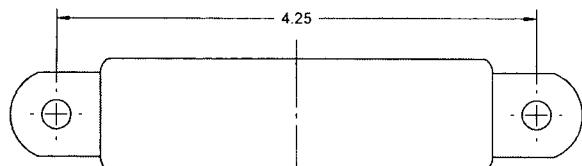
DESIGN	<i>h</i>
DRAWN	<i>h</i>
CHECKED	<i>h</i> S
MFG. APPR.	<i>h</i>
APPROVED	<i>h</i>
DE APPR.	<i>h</i>
DATE	09.11.11

DART AEROSPACE LTD  
HAWKESBURY, ONTARIO, CANADA  
DRAWING NO. D4011 REV. B  
SHEET 3 OF 4  
TITLE CLAMP SCALE NTS  
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100847



D4011-5F CLAMP, SHORT (OEM) FLAT PATTERN

D4011-5 CLAMP, SHORT (OEM)  
(MAKE FROM D4011-5F)

RELEASED  
2009-11-24  
MP

DESIGN	<i>AS</i>	DART AEROSPACE LTD	
DRAWN	<i>AS</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>AS</i>	DRAWING NO.	
MFG. APPR.	<i>AS</i>	D4011	
APPROVED	<i>AS</i>	REV. B	
DE APPR.	<i>AS</i>	SHEET 4 OF 4	
DATE	09.11.11	SCALE	NTS

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8 7 6 5 4 3 2 1